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## **Determinants of Disruption**

# **Institutional Misconduct Among State-Committed Delinquents**

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With a few exceptions, most of the empirical research on institutional misconduct has focused on adult prison inmates. As a result, little is known about the factors related to misconduct among state-committed delinquents. This article examined the institutional misconduct of 4,684 state-committed delinquents released from a large Southern juvenile correctional system. Males, non-Whites, gang members and/or those with gang-related family members, and those with earlier, more serious, and more extensive delinquent histories were significantly more likely to engage in serious forms of institutional misconduct. These predictors were consistent for the model examining a less serious but disruptive form of institutional misconduct, with the exception that race, sex, and gang membership failed to be significant. The analyses also indicate that the determinants of misconduct for males may differ for state-committed females. This article concludes with suggestions for future research on institutional misconduct involving state-committed delinquents.

**Keywords:** institutional misconduct; incarcerated delinquents; institutional violence; importation; deprivation

Write-ups, rule infractions, incidents, and disciplinary tickets—collectively referred to as institutional misconduct—say much about correctional environments (Dilulio, 1987). Among other things, misconduct is an important indicator of inmate maladjustment in correctional settings. Although numerous measures of maladjustment exist, official misconduct—including violence against officers and inmates—has received a disproportionate amount of attention in the literature (Gover, MacKenzie, & Armstrong, 2000). The disproportionate focus on official misconduct is perhaps justified. Notwithstanding that prison infractions cost untold resources (Lovell & Jemelka, 1996), inmate misconduct may lead to sentence extensions and associated overcrowding, offender reclassification and housing movements, and a host of other administrative, managerial, and legal issues that negatively impact correctional settings (Cao, Zhao, & Van Dine, 1997). The bottom line is that offender misconduct has important ramifications for correctional environments and makes the correctional setting dangerous and disruptive for those who work and reside in these settings.

There have been several studies on the determinants of misconduct among adult prison inmates in the past several years, and this subject continues to receive attention in the correctional literature. These studies have examined the determinants of rule-violating behavior among murderers (Sorensen, Wrinkle, & Gutierrez, 1998), gang members (Gaes, Wallace, Gilman, Klein-Saffran, & Suppa, 2002), drug users (Jiang, 2005), and general samples of offenders, including both male and female prison inmates (Camp, Gaes, Langan, & Saylor,

2003; Cao et al., 1997; Collie & Polaschek, 2003; Goetting & Howsen, 1986; Gover et al., 2000; Harer & Steffensmeier, 1996; Hochstetler & DeLisi, 2005; Islam-Zwart & Vik, 2004; Jiang & Fisher-Giorlando, 2002; Loucks, 2005; Wooldredge, Griffin, & Pratt, 2001). Dependent variables in previous research have ranged from violent misconduct to property offenses, from drug/alcohol violations to refusing to obey institutional rules, and composite measures derived from these and other forms of misconduct (see, e.g., Camp et al., 2003: see Appendixes A and B). Among other areas, a major policy focus of the literature has been to gain an understanding of the determinants of institutional misconduct so as to better address the challenges it creates (Gover et al., 2000).

## Theoretical Models and Prisoner Misconduct

Much of the research on the determinants of misconduct among adult prisoners has been framed and guided by the importation and deprivation models of prison adjustment or some combination of these models (Gendreau, Goggin, & Law, 1997; Gover et al., 2000; Irwin & Cressey, 1962; Sykes, 1958). The major assumption of the deprivation model is that prison behavior is largely the product of a prisoner's response to the "abnormal" prison environment and the pains of imprisonment (Sykes, 1958). According to Poole and Regoli (1983), inmate misconduct under the deprivation model constitutes

a normal reaction of normal people to abnormal conditions. Coercive, brutal, and dehumanizing prison conditions may force inmates into predatory behavior in order to cope with the pains of imprisonment...regardless of the characteristics of inmates. (p. 215)

Certain aspects of prison life exert a negative pressure on inmates to buck the institutional regime and violate rules (MacDonald, 1999). Factors such as arbitrary rule enforcement by guards, staff-to-inmate ratio, overcrowding, the length of one's sentence or time incarcerated, security level of the institution, and the orientation of the institution (e.g., custodial or treatment) may impact the probability of institutional misconduct.

In contrast, the major assumption of the importation model is that prison behavior is largely determined by the past experiences and characteristics that inmates bring into prison (Irwin & Cressey, 1962). Thus, the prison environment has less to do with an inmate's behavior; rather, an inmate's traits, experiences, and lifestyle in the free world are simply imported into the prison where the inmate resumes his deviant lifestyle (Poole & Regoli, 1983, p. 215).

Violence in prison is the logical and predictable result of the commitment of a collection of individuals whose life histories have been characterized by disregard for law, order, and social convention, in addition to a concurrent propensity for aggression... regardless of the institutional setting.

Therefore, variables that led to criminality on the outside are the same variables that lead to institutional infractions on the inside, according to the importation model (Irwin & Cressey, 1962; Sorensen et al., 1998). These variables include, but are not limited to, individual-, criminal-, and social-history-related variables such as conviction history, arrest history, history of violence, substance abuse, parental and sibling criminality, educational level, personality style, free-world

gang membership, age or its correlates (e.g., age at prison admission), and race (Cao et al., 1997; Harer & Steffensmeier, 1996; Hochstetler & DeLisi, 2005; Jiang & Fisher-Giorlando, 2002).<sup>2</sup>

There have been numerous tests during the past several years of the importation and deprivation models and studies in general on prison life and inmate adjustment (Gendreau et al., 1997; Jiang & Fisher-Giorlando, 2002; Wright & Goodstein, 1989). Recent studies find support for deprivation explanations in whole or part (Gover et al., 2000; Hochstetler & DeLisi, 2005; Jiang & Fisher-Giorlando, 2002), for the importation model in whole or part (Cao et al., 1997; Gover et al., 2000; Harer & Steffensmeier, 1996; Hochstetler & DeLisi, 2005; Kellar & Wang, 2005; Sorenson et al., 1998), and still others are somewhere in between finding merits with variables from both models or from related theoretical perspectives using similar variables (Camp et al., 2003; Hochstetler & DeLisi, 2005; Kellar & Wang, 2005; see also Gover et al., 2000 for juvenile "anxiety" as dependent variable; Jiang & Fisher-Giorlando, 2002 for "situational model"; Wooldredge et al., 2001 using individual and aggregate theories of informal social control).<sup>3</sup>

Some of the more consistent criticisms of misconduct research include complaints of low sample size, variable omissions, and/or ambiguous variable specifications and proxies (see Wright & Goodstein, 1989; Jiang & Fisher-Giorlando, 2002; Paterline & Petersen, 1999; Porporino & Zamble, 1984; Steinke, 1991; Wright, 1991). Other studies have been criticized for focusing solely on misconduct instead of other indicators of inmate maladjustment (e.g., anxiety, suicidal behavior), for using inmate self-reports of institutional misconduct, data from only one institution, and cross-sections of incarcerated time (e.g., 6month time period of misconduct), and, in general, that the importation and deprivation models may be too simplistic to explain the complex nature of misconduct (Gover et al., 2000; MacDonald, 1999; Porporino & Zamble, 1984).

Despite these conceptual and methodological criticisms, one of the greatest gaps in the misconduct literature is that little is known about the nature and extent of misconduct in juvenile institutions involving state-committed delinquents. With the exception of one study (MacDonald, 1999), there has not been, to our knowledge, a systematic examination of the factors related specifically to institutional misconduct among state-committed delinquents in more than 20 years.4 The lack of research on the determinants of misconduct among institutionalized juveniles is problematic on a number of fronts. This is primarily because institutionalized delinquents may be most amenable to institutional interventions and programs that can help to modify their institutional misbehavior, and perhaps impact other juvenile justice outcomes (e.g., recidivism), once they emerge from incarceration (Trulson, Marquart, Mullings, & Caeti, 2005). The limited research on misconduct among state-incarcerated delinquents, however, leaves little for an understanding of the causes and consequences of such behavior. This study seeks to fill some of that gap in knowledge.

## Literature on the Determinants of Misconduct in Correctional Settings

This review focuses on the limited juvenile misconduct studies and is supported by recent research involving misconduct among adult prison inmates. The lack of juvenile 10

misconduct research simply leaves little for which to frame and guide the present study. Consulting adult misconduct research can provide some insight as to the determinants of institutional misconduct in general. Thus, the goal of this literature review is threefold: (a) to uncover the strongest and most consistent predictors of institutional misconduct involving both juveniles and adults, (b) to compare and contrast the determinants of juvenile misconduct to adult misconduct guided by research on each respective group, and (c) to help frame and guide the present study because of the lack of juvenile misconduct research.

In one of the earliest empirical studies on juvenile institutional misconduct, Poole and Regoli (1983) examined the impact of importation and deprivation variables on institutional violence. Poole and Regoli collected observational, interview, and official data for males from four juvenile correctional institutions in four different states. The authors compiled four importation model variables (race, age, attitudes toward aggression, and preinstitutional violence) and three deprivation model variables (assimilation to the "inmate code," type of institution [treatment-oriented versus custodial], and length of time served). Their analysis revealed that pre-institutional violence emerged as the strongest and most consistent predictor of institutional violence. Poole and Regoli also revealed that two deprivation variables (organization type and inmate code) were positively related to institutional violence, finding incarceration in a more custody-orientated environment and subscribing to the inmate code related to an increased likelihood of institutional violence.

Outside of the Poole and Regoli (1983) study, only one article has appeared in the past 20 years that has directly addressed misconduct among state-committed juveniles.<sup>5</sup> MacDonald (1999) examined institutional violence (against both staff and inmates) and institutional drug use among youths incarcerated and paroled from the California Youth Authority (CYA) in the mid-1980s. MacDonald collected seven importation variables (time between first arrest and most recent commitment, number of previous arrests, parental and sibling criminality, prior gang involvement, violent criminal history score, drug criminal history score, and race), and two deprivation variables (level of institutional security and staff-to-inmate ratio). MacDonald revealed that subjects with a prior criminal history of violence and a prior history with gangs were significantly more likely to be involved in violent misconduct while incarcerated. These variables supported the importation model (see Gaes et al., 2002 for recent analyses concerning gang affiliation as a determinant of prison violence among adult prison inmates). For deprivation factors, MacDonald found that individuals in highly secure settings were significantly more likely to be involved in institutional violence than those in institutions with a lower level of security, after controlling for other variables (see Gover, MacKenzie, & Armstrong, 2000 on institution type and impact on juvenile anxiety). In a second analysis, MacDonald examined the factors related to drug misconduct while institutionalized. MacDonald revealed that individuals in higher security settings were significantly more likely to be involved in drug misconduct, holding constant the effects of other variables.

An exhaustive review of studies examining institutional misconduct among adult offenders would include a long and impressive list. Four relatively recent studies involving adult prison inmates are examined to supplement the lack of juvenile misconduct research and to frame and guide the present study as to what is known about the determinants of institutional misconduct.<sup>6</sup> Harer and Steffensmeier (1996) tested the importation and deprivation models on misconduct data from 58 male federal correctional facilities in 1988 and 1989. They examined numerous individual-level, criminal-history, and institutional-level variables as related to

two dependent measures in their study: violent misconduct and alcohol/drug misconduct (see Harer & Steffensmeier, 1996, pp. 352-355 for variable definitions). Harer and Steffensmeier revealed that race emerged as one of the strongest and most consistent predictors of prisoner misconduct. Black inmates were significantly more likely to be involved in violent misconduct than were White inmates after controlling for other individual, community background and prison environment variables, but they were less likely to be involved in alcohol and/or drug misconduct. Age and prior criminal history also emerged as significant and consistent predictors of both violence and alcohol/drug violations in which younger inmates and those with higher criminal history scores were significantly more likely to be involved in these forms of institutional misconduct (Flanagan, 1980, 1983; Wooldredge et al., 2001). Interestingly, time served was not related to an increased likelihood of violent misconduct controlling for the influence of other variables, although those with more months served were significantly more likely to be involved in alcohol/drug misconduct (Harer & Steffensmeier, 1996, pp. 338-341).

Cao and colleagues (1997) tested the importation and deprivation variables as related to serious and nonserious prison "disciplinary tickets" involving both male and female inmates. The authors revealed that importation model variables (age at prison admission, education, gender, race, and juvenile incarceration history) were significant predictors of serious rule violations. Those younger at prison admission, those with less education, those incarcerated as juveniles, females, and non-Whites were significantly more likely to commit a serious rule violation. For nonserious but disruptive prison violations, Cao and colleagues revealed that being young and single increased the probability of misconduct. Overall, Cao and colleagues revealed that age at prison admission was the most consistent and reliable predictor of both serious and nonserious prison rule violations, finding that as age increases, prison violations decrease (Flanagan, 1980, 1983; Harer & Steffensmeier, 1996; Wooldredge et al., 2001). In conclusion, Cao and colleagues noted that their study revealed the importance of differentiating between the severity of rule infraction—that certain variables were related to more severe rule infractions (i.e., young age at prison admission, low education, female gender, history of juvenile incarceration, and race as non-White), whereas other variables were related only to minor rule infractions (being single and age at prison admission being related to both outcome indicators; see Camp et al., 2003 for similar findings on dependent-variable specification and determinants of inmate misconduct). Summing up their findings, Cao and colleagues find more consistent support for importation model variables than deprivation model variables.

Sorensen and colleagues (1998) tested the impacts of importation and deprivation variables on rule violations among a sample of murderers sentenced to life without parole or death. Race and age emerged as consistent predictors of rule violations, finding that as age increases, the probability of misconduct decreases, and that being Black was a significant predictor of rule violations. Their findings on age and race are consistent with the bulk of research in the adult arena on determinants of rule infractions (Cao et al., 1997; Harer & Steffensmeier, 1996; Wooldredge et al., 2001) but not all (see Jiang & Fisher-Giorlando, 2002).

Jiang and Fisher-Giorlando (2002) examined the determinants of disciplinary reports among 186 adult inmates from a Southern prison system. The authors included 4 independent variables that were indicators of the deprivation model, 13 variables measuring importation model indicators, and 19 variables as indicators of situational aspects in the prison environment (e.g., time of incident, location of incident, etc.; Jiang & Fisher-Giorlando, 2002, pp. 345-346). The authors revealed that deprivation and situational variables were most significant in explaining incidents against correctional staff, whereas importation and situational variables emerged as predictors of inmate-on-inmate assaults. Thus, Jiang and Fisher-Giorlando revealed that the type of misconduct makes a difference (see Camp et al., 2003; Cao et al., 1997). Inconsistent with previous research, Jiang and Fisher-Giorlando did not find any relation of age and race to prison misconduct (Cao et al., 1997; Harer & Steffensmeier, 1996; Sorensen et al., 1998; Wooldredge et al., 2001).

#### Summary

The only recent study to examine institutional misconduct specifically among juveniles revealed that importation variables (prior history of violence and prior gang involvement) were significant predictors of institutional violence. Race and age, however, did not emerge as significant predictors of institutional misconduct in the two juvenile studies examined (see Poole & Regoli, 1983, p. 224 on race impact in "treatment-oriented institutions"), although most studies on adult inmate misconduct showed consistent and significant effects for these variables. The few variables used in juvenile misconduct research prevent further comparison to adult misconduct research.

As a whole, pre-prison and individual characteristics of inmates (i.e., young age or young age at prison admission, low educational level, history of pre-institutional violence, and being non-White) were the strongest and most consistent predictors of misconduct across the adult studies, rather than deprivation model factors. In the juvenile research, three deprivation variables, security level (MacDonald, 1999), organization type (Poole & Regoli, 1983), and adherence to an inmate code (Poole & Regoli, 1983) emerged as significant predictors of misconduct among institutionalized juveniles. In the adult misconduct studies, a few deprivation model variables were significant, but there was a relative lack of consistency across studies. Although the findings in the two juvenile studies examined are important, the absence of additional studies on the determinants of institutional misconduct among state-committed juveniles leaves little for which to compare these findings—even in light of the growing body of research on the determinants of misconduct among adult prison inmates.

## The Present Study

This article examines the determinants of institutional misconduct among youth incarcerated and released from a large Southern juvenile correctional facility. Previous research of this nature for juveniles is scant, although there is a growing body of research examining the determinants of misconduct among adult prisoners. Unfortunately, it is not known whether the determinants of adult prisoner misconduct differ or are comparable to those for state-committed juvenile delinquents. We simply do not know much about what affects the conduct of institutionalized juveniles.

There are two primary issues that result from the lack of misconduct research on juveniles. First, there simply is not enough research to make a firm conclusion of the impact of race, age, and other individual-level, criminal-history, or institution-based variables on juvenile

institutional misconduct. The fact that the two juvenile studies examined above were either written more than 20 years ago (Poole & Regoli, 1983) or used data on juveniles incarcerated more than 20 years ago (MacDonald, 1999) means that research on the determinants of institutional misconduct for juvenile offenders is needed for today's state-committed juveniles. Second, there are fundamental differences between adult prison inmates and state-committed juvenile offenders in the type, degree, history, and correctional context in which they are situated—thus the determinants of disorder for adults may differ for juveniles (Bartollas, Miller, & Dinitz, 1976). It is premature to assume that what impacts the institutional conduct of adults automatically applies to state-committed juveniles.

This study proposes to fill some of the gap in knowledge about the determinants of misconduct in juvenile facilities and involving state-committed juveniles. This study explores institutional misconduct among nearly 5,000 state-committed delinquents incarcerated and released from a large Southern juvenile correctional system. It focuses primarily on the impact of individual and criminal history variables, for research has revealed that such variables are the most consistent predictors of institutional misconduct (see Camp & Gaes, 2005). This article triples the number of variables used in previous research examining the determinants of misconduct among state-committed juvenile delinquents, uses data from every institution in the state under study, and has a very large sample size relative to other juvenile misconduct studies and most adult misconduct studies. This article also includes data covering the entire time of incarceration (instead of cross-sections of time), includes both males and females, and includes a measure of serious and nonserious institutional misconduct.

#### Method

## Sample

This study examines the institutional misconduct of 4,684 youth released from a large Southern juvenile correctional system. The sample is comprised of two separate cohorts of youth; the first cohort includes all youth released from this juvenile correctional system from their first incarceration in 1997-1998, and the second cohort includes all youth released from their first state incarceration in 2003-2004. These cohorts were merged for the final sample. 10

Of the 4,684 state delinquents, female delinquents account for 8% (375) of the final sample, and males account for 92% (4,309). Hispanic youths account for 1,974 (42%) of the statecommitted delinquents, Black youths account for 1,607 (34%), White youths account for 1,058 (23%) of the sample, and the remaining 45 (1%) youths in the sample are coded as "other."

#### **Data and Variables**

All data in this study were provided by the juvenile correctional system. Data on the individual characteristics of youth, delinquent histories, and other data in this study were compiled by the juvenile correctional system at a statewide intake unit on the youths' commitment and during their institutionalization. All state-committed youth stay at intake for approximately 7 weeks and then are transferred to specific facilities around the state to complete their commitment period. Data complied by the juvenile correctional system at intake and during institutionalization come from numerous sources including, but not limited to, state- and county-level official records, on-site diagnostic procedures at intake, observations from professional and correctional staff, self-report information from youth, or a combination of these sources.

Data on the official institutional misconduct of state-committed delinquents are collected at each juvenile facility in the state under study. Institutional misconduct forms are standardized across all institutions, and data from these forms are entered and maintained at a centralized location in the state.<sup>11</sup>

#### **Independent Variables**

Three sets of independent variables are used in the analyses: demographic variables, delinquent history variables, and risk factor variables (see Appendix A for coding).

There are two demographic variables, race and sex. Delinquent history variables include five continuous and five categorical variables. The continuous variables include age at first formal referral to the juvenile justice system, age at state commitment, age at release from incarceration, length of incarceration (in days), and the number of felony adjudications prior to state commitment. Categorical delinquent history variables include a weighted-risk-classification score completed by the juvenile correctional system, whether the youth was on probation at state commitment, the degree of the youth's commitment offense, whether the delinquent was a known gang member at the time of commitment, and whether the youth was previously violent toward his or her family.

There are numerous variables that we consider risk-factor variables collected for the state delinquents in this study. There are continuous and categorical risk-factor variables, and these include: gang affiliation of youth's family members; number of previous out-of-home placements; the youth's highest grade completed; presence of divorce in the youth's family; whether the youth lived in poverty; whether the youth was confirmed to be physically abused, sexually abused, emotionally abused, abandoned by his or her family, or physically neglected; whether the youth has specialized treatment needs (emotional disturbance, sex offender, and capital offender); whether the youth received specialized treatment for these needs while incarcerated; and whether the youth was mentally challenged, mentally ill, or demonstrated suicidal tendencies.

## Dependent Variables: Institutional Danger and Institutional Disruption

There are two measures of institutional misconduct examined in this study. The first dependent variable measure is institutional danger and is a composite dichotomous measure of whether or not the youth assaulted staff, assaulted another resident, and/or possessed a weapon while incarcerated. The second dependent measure, called "institutional disruption" in this article, is a general measure of misconduct collected by the juvenile correctional system. This variable measures whether or not a youth failed to comply with reasonable written requests from staff. Examples of institutional disruption are numerous but could include such behaviors as failing to complete institutional chores or failing to keep a living area clean. After two or more failed attempts by staff to gain compliance with a certain requested

behavior, a youth receives an incident report for failing to comply with a reasonable written request.

In general, institutional dangers have received the highest level of rule violation in this juvenile correctional system, whereas those considered institutional disruptions have been involved in less serious but disruptive incidents by failing to follow institutional rules and staff instructions.

## **Data Analysis Plan**

The analysis proceeds in two stages. The first stage of the analysis is a descriptive look at the demographic, criminal-history, and risk-factor variables for the full sample of state-committed delinquents (see Table 1). The descriptive analysis then examines the level and extent of misconduct attributed to the full sample of state delinquents (see Table 2). In each descriptive analysis, the first column includes statistics for the full sample, the second column examines only males, the third column females, and the fourth column compares males and females.

Following the descriptive analysis, logistic regression is used to examine the influence of the independent variables on the two outcome measures of institutional danger and institutional disruption. The logistic regression analysis proceeds as follows:

- 1. Logistic regression model predicting institutional danger for the full sample, then for males, and then for females.
- 2. Logistic regression model predicting institutional disruption for the full sample, then for males, and then for females.

The small number of females relative to males released from the juvenile correctional system each year may mask substantive and/or statistically significant relationships if not analyzed separately. Previous related research on adult prisoners suggests that the determinants for female inmate misconduct may differ from that of their male counterparts (Cao et al., 1997). Thus, females are analyzed separately from males in each logistic regression model for institutional danger and institutional misconduct.

## **Descriptive Statistics**

## Individual, Delinquent History, and Risk **Factors for State-Committed Delinquents**

Full sample. Table 1 examines the individual, delinquent history, and risk factors for the state-committed delinquents in this study. Proportions (PP) and standard deviations (SD) are included for categorical variables, and means (M) and standard deviations are included for continuous variables.

Analyses in Table 1 reveal that the overwhelming majority of the full sample is non-White (77%) and male (92%). The youths under study were nearly 13 years of age at their first formal referral to the juvenile justice system, were committed to the state at roughly age 16, were

Individual, Delinquent History, and Risk Factors for State-Committed Delinquents Table 1

	Full Sample $(N = 4,684)$	ample ,684)	Males $(n = 4,309)$	les ,309)	Females $(n = 375)$	ales 375)	Male/Female Comparisons
Variables	PP/M	SD	PP/M	SD	PP/M	SD	t Value
Demographics							
Race (I = non-White)	0.77	0.42	0.78	0.42	0.75	0.44	us
Sex $(1 = male)$	0.92	0.27				1	
Delinquent history							
Age at first formal referral	12.98	1.55	12.98	1.56	12.93	1.43	su.
Age at state commitment	15.97	1.08	15.98	1.07	15.78	1.16	3.48*
Age at release from incarceration	17.29	1.22	17.32	1.23	17.01	1.24	4.61*
Length of incarceration (days)	484.53	339.05	487.48	343.93	450.62	275.04	2.02*
Felony adjudications prior to state commitment	1.22	0.75	1.24	0.76	0.95	0.64	7.29*
Risk score $(1 = high risk)$	0.71	0.45	0.72	0.45	0.63	0.48	3.71*
On probation at commitment $(1 = yes)$	69.0	0.46	69.0	0.46	0.73	0.45	ns.
Degree of commitment offense $(1 = felony)$	0.79	0.40	0.80	0.40	0.74	0.44	2.73*
Known gang member $(1 = yes)$	0.42	0.49	0.43	0.50	0.30	0.46	4.85*
Violent toward family $(1 = yes)$	0.30	0.46	0.30	0.45	0.41	0.49	-5.23*
Risk factors							
Family members gang related $(1 = yes)$	0.13	0.34	0.14	0.34	0.00	0.28	2.68*
Number of previous out-of-home placements	0.89	1.39	0.87	1.38	1.14	1.50	-3.65*
Highest grade completed	8.11	1.20	8.11	1.19	8.16	1.32	SU.
Parents divorced if married $(1 = yes)$	0.32	0.47	0.32	0.47	0.29	0.46	SU.
Family in poverty $(1 = yes)$	0.71	0.63	0.71	0.63	0.78	69.0	-2.15*
Evidence of physical abuse $(1 = yes)$	0.18	0.38	0.17	0.38	0.27	0.44	-4.77*
Evidence of sexual abuse $(1 = yes)$	0.10	0.30	0.08	0.27	0.37	0.48	-18.03*
Evidence of emotional abuse $(1 = yes)$	0.23	0.42	0.22	0.41	0.38	0.49	-7.49*
Abandoned $(1 = yes)$	0.13	0.34	0.13	0.34	0.15	0.36	SU.
Evidence of physical neglect $(1 = yes)$	0.09	0.29	0.09	0.29	0.15	0.36	-4.19*
Need for emotional disturbance treatment $(1 = yes)$	0.38	0.49	0.37	0.48	0.54	0.50	-6.59*
Need for sex offender treatment $(1 = yes)$	0.07	0.26	0.08	0.27	0.01	0.07	5.25*

Need for capital offender treatment $(1 = yes)$	0.08	0.27	0.08	0.27	0.10	0.30	su
Received emotional disturbance treatment $(1 = yes)$	0.00	0.29	0.09	0.28	0.17	0.37	-5.26*
Received sex offender treatment $(1 = yes)$	0.02	0.14	0.02	0.15	0.00	0.00	2.94*
Received capital offender treatment $(1 = yes)$	0.00	0.07	0.00	90.0	0.01	0.11	su
Youth mentally challenged $(1 = yes)$	0.08	0.27	0.08	0.27	0.08	0.27	su
Youth mentally ill $(1 = yes)$	80.0	0.27	0.07	0.26	0.11	0.31	-2.22*
Any suicidal tendencies $(1 = yes)$	0.05	0.23	0.05	0.22	0.08	0.28	-2.63*

Note: PP = proportion; M = mean; SD = standard deviation; ns = not significant. Categorical variables were dichotomized and indicate proportion, with 1 as coding score under the PP/M column. For example, Race (1 = non-White) at PP/M.77 means 77% of the 4,684 full sample is non-White. Values are rounded to the nearest one hundredth of a percentage, and using actual proportions to obtain N may be slightly off because of rounding. \*p < .05.

		ample 4,684)		ales 4,309)		nales 375)	Male/Female Comparisons
Institutional Misconduct	PP/M	SD	PP/M	SD	PP/M	SD	t Value
Total incidents during incarceration	52.65	99.40	52.67	100.36	52.51	87.76	0.30
Institutional danger (1 = yes) Institutional disruption (1 = yes)	0.56 0.39	0.50 0.49	0.58 0.39	0.49 0.49	0.35 0.33	0.48 0.47	8.53* 2.40*

Table 2
Institutional Misconduct of State-Committed Delinquents

Note: Categorical variables were dichotomized and indicate proportion (PP), with 1 as coding score under the PP/M column. For example, institutional danger 0.56 means that 56% of the full sample was involved in at least one staff assault, resident assault, and/or weapon possession while incarcerated. Total incidents during incarceration include the average for all incidents in this juvenile correctional system, including incidents not included in the logistic regression analysis of institutional danger and institutional disruption. It is also the case that a youth can have multiple incidents of the same nature and/or multiple incidents during the same offense. Values are rounded to the nearest one hundredth of a percentage, and using actual proportions to obtain N may be slightly off because of rounding.

released from their state commitment at approximately 17 years of age, and served an average of 484 days incarcerated, or roughly 1.5 years. Because of the variance concerning the average length of incarceration, the median number of days for the full sample (369 days not shown in tabular form) is perhaps more accurate for the typical delinquent in the full sample.

Concerning other aspects of their delinquent histories, nearly 70% of the full sample was on probation at the time of their state commitment, and almost 80% were committed to the state for a felony offense. On average, the state delinquents examined in this article had more than one felony adjudication prior to their state commitment. The juvenile correctional system also completes a weighted risk assessment index or risk classification score comprised of delinquent and behavioral history indicators including, but not limited to, the number of felony referrals, number of prior placements, number of prior felony adjudications, and age at first formal referral to the juvenile justice system. According to this indicator, 71% of the state delinquents were considered high risks. Forty-two percent of the full sample was known to be gang members by the juvenile correctional system at their commitment, and roughly 13% had family members that were gang related. Thirty percent of the state delinquents had a history of violence against their family. Although the full sample of state delinquents averaged fewer than one out-of-home placement prior to their commitment, not shown in tabular form is that 48% had no out-of-home placements, and 31% had only one out-of-home placement prior to their state commitment. Thus, the majority of the state-committed delinquents did not have an extensive history of out-of-home placements prior to their commitment.

Seventy-one percent of the state delinquents came from families reported to be in poverty, 32% had experienced divorce in their family, and the youth in this study averaged just more than an eighth-grade education. Different proportions of state delinquents had documented experiences of physical abuse (18%), sexual abuse (10%), emotional abuse

<sup>\*\*\*</sup>*p* < .001.

(23%), or physical neglect (9%) or had been "abandoned" by their family (13%). As with abuse and neglect measures, most state delinquents did not present a need for sex offender treatment (7%), capital offender treatment (8%), or emotional disturbance treatment (38%). As a result, the majority of state delinquents did not receive these forms of specialized treatments by the juvenile correctional system. Eight percent of youth were considered mentally challenged and/or mentally ill, and 5% of youth exhibited suicidal tendencies as determined by correctional staff.

Male and female comparisons. The analysis in Table 1 also includes a comparison of male and female state delinquents. Several statistically significant differences were found between the groups.<sup>12</sup> Males were significantly older than females at their state commitment (15.98 versus 15.78) and at their release from incarceration (17.32 versus 17.01) but not at their age at first formal referral to the juvenile justice system (12.98 versus 12.93). Males served roughly 37 days longer on average than females; however, the large standard deviation for both groups suggests much variance around the average length of stay. Not shown in tabular form is that males had a median number of days served at 369 and females at 366. Thus, taking into account variance around the average length of stay shows that the typical male and female state delinquent served a comparable number of days incarcerated.

Other delinquent history variables show that males had a higher number of felony adjudications prior to commitment (1.24 versus 0.95), a greater proportion of males were considered high risks by the juvenile correctional system (72% versus 63%), and a significantly greater proportion of males had committed a felony as their commitment offense (80% versus 74%). Forty-three percent of the males were known gang members and 30% of females were known gang members at their commitment. A significantly higher proportion of female state delinquents, however, was found to be violent toward their family (41% versus 30% for males).

Considering risk factors, a significantly higher proportion of males had family members that were gang-related compared to females (14% versus 9%). However, females experienced a higher number of previous out-of-home placements (1.14 versus 0.87), were more likely to be in poverty at their commitment (78% versus 71%), and were significantly more likely to have documented experiences of physical abuse (27% versus 17%), sexual abuse (37% versus 8%), emotional abuse (38% versus 22%), and physical neglect (15% versus 9%). Furthermore, females were significantly more likely to present a need for emotional disturbance treatment (54% versus 37%), and a significantly greater proportion of females were found to be mentally ill (11% versus 7%) and to demonstrate suicidal tendencies (8% versus 5%) compared to males.

Overall, the descriptive comparisons generally show that males appeared slightly but not significantly older than females at their first formal contact with the juvenile justice system, were older at their state commitment, and served more days of incarceration than females on average. Males also appeared more serious than females in their delinquent histories. However, females demonstrated a greater likelihood of being violent toward their family, and a significantly greater proportion of females were considered mentally ill and demonstrated suicidal tendencies. These findings may relate to the fact that female state delinquents experienced higher levels of most forms of abuse compared to males.

#### **Institutional Misconduct of State-Committed Delinquents**

Full sample. Table 2 examines the institutional misconduct of state delinquents. The state-committed delinquents were involved in an average of roughly 53 incidents each during their incarceration. Not shown in tabular form, however, is that the full sample of 4,684 state delinquents committed a total of 246,624 separate incidents during their incarceration. This total includes all incidents committed by the state delinquents during their entire time of incarceration, including incidents not specifically examined in the logistic regression models of this article. It should also be noted that a youth can have multiple incidents of the same nature and/or incur multiple different incidents during the same offense. Noting these considerations, the large standard deviation suggests much variation concerning the average number of incidents. For example, not shown in Table 2 is that the median number of incidents among the delinquents in the full sample was 16, with a mode of 0. Six hundred and thirty-nine youth did not have any incidents of any kind, although a number of youth had hundreds of incidents of varying kinds. Therefore, the average number of incidents can be misleading.

Of the full sample, 56% were considered institutional dangers by having assaulted staff or another resident, and/or they had been found in the possession of a weapon on at least one occasion during their incarceration. Thirty-nine percent were considered institutional disruptions by failing to comply with a reasonable written request of staff on at least one occasion during their incarceration. The bottom line is that more than half of the state-committed delinquents were considered institutional dangers but fewer than half disrupted the institutional program by failing to comply with reasonable written requests of staff.

Male and female institutional misconduct comparisons. Table 2 also includes a comparison of males and females on the indicators of institutional misconduct in this article. In terms of the average number of incidents during incarceration, males and females were not significantly different—they both averaged roughly 53 incidents during their incarceration. However, significantly more males were considered institutional dangers (58% versus 35%) and institutional disruptions by failing to follow the reasonable written requests of staff (39% versus 33%). Not shown in tabular form is that male state delinquents committed a total of 226,934 institutional infractions of any kind, and females committed 19,690 institutional infractions of any kind.

For the two dependent variables in this study (institutional danger and institutional disruption), males appeared significantly more likely to engage in these specific behaviors. Relative to their sample size, however, females on average committed comparable levels of incidents of any kind.

## **Multivariate Analysis**

Each logistic regression table includes three separate analyses. The first three models in Table 3 include an analysis for the full sample of state delinquents, then males, and then females concerning the dependent variable institutional danger. The three models in Table 4 examine the determinants of institutional disruption for the full sample of state-committed youth, then males, and then females.<sup>14</sup>

Table 3

Logistic Regression Model Predicting Institutional Danger

	Full	Full Sample $(N = 4,684)$	= 4,684)	V	Males $(n = 4,309)$	309)	Я	Females $(n = 375)$	375)
Independent Variables	В	SE (B)	Exp (B)	В	SE (B)	Exp (B)	В	SE (B)	Exp (B)
Race as non-White	0.19	0.08	1.20*	0.20	0.09	1.22*	0.14	0.31	1.15
Age at first formal referral to juvenile system	-0.09	0.02	0.92*	-0.10	0.02	0.91*	-0.01	0.10	0.99
Length of incarceration (days)	0.00	0.00	1.00*	0.00	0.02	1.00*	0.00	0.00	1.00*
On probation at state commitment	0.32	0.07	1.37*	0.31	0.07	1.36*	0.52	0.30	1.69
Risk score	0.56	0.08	1.75*	0.54	80.0	1.72*	0.73	0.30	2.07*
Highest grade completed	-0.17	0.03	0.84*	-0.18	0.03	0.83*	-0.08	0.10	0.93
Gang influence	0.14	0.07	1.15*	0.14	0.07	1.15*	0.26	0.27	1.30
No. of previous out-of-home placements	0.13	0.03	1.14*	0.14	0.03	1.15*	90.0	0.08	1.06
Violent toward family	0.18	0.08	1.19*	0.17	80.0	1.19*	0.23	0.26	1.26
Parents divorced	-0.17	0.07	0.89	-0.13	0.07	0.88	-0.10	0.23	0.91
Family in poverty	0.04	90.0	1.04	90.0	90.0	1.06	-0.12	0.20	0.90
Abuse	0.09	0.07	1.09	0.09	0.08	1.10	0.08	0.27	1.08
Treated	-0.22	0.07	0.81*	-0.29	80.0	0.75*	0.77	0.28	2.17*
Mental health	0.05	0.09	1.05	0.03	0.10	1.03	0.25	0.33	1.29
Cohort 1997/1998	-0.57	0.07	0.57*	-0.61	0.07	0.54*	0.14	0.28	1.15
Sex	1.16	0.13	3.20*	1		1	1		
Constant	90.0-	0.41	0.94	1.33	0.41	3.78*	-3.05	1.55	0.05
<i>X</i> <sup>2</sup> / <i>df</i>			823.98/16			692.03/15			91.87/15
p			<.001			<.001			<.001
Nagelkerke $R^2$			0.22			0.20			0.30
$\operatorname{Cox} \& \operatorname{Snell} \mathbb{R}^2$			0.16			0.15			0.22

n < 0.5

Table 4 Logistic Regression Model Predicting Institutional Disruption

B				0					
	Full	Full Sample ( $N = 4,684$ )	= 4,684)	N	Males $(n = 4,309)$	309)	Ä	Females $(n = 375)$	375)
Independent Variables	В	SE (B)	Exp (B)	В	SE (B)	Exp (B)	В	SE (B)	Exp (B)
Race as non-White	0.05	0.10	1.05	0.05	0.10	1.05	-0.05	0.32	0.96
Age at first formal referral to juvenile system	-0.10	0.02	0.10*	-0.09	0.02	0.91*	-0.14	0.10	0.87
Length of incarceration (days)	0.00	0.00	1.00*	0.00	0.00	1.00*	0.00	0.00	1.00*
On probation at state commitment	0.30	0.08	1.35*	0.33	0.08	1.39*	-0.10	0.30	0.91
Risk score	0.48	0.08	1.62*	0.55	0.09	1.73*	-0.33	0.30	0.72
Highest grade completed	-0.13	0.03	*68.0	-0.14	0.03	0.87*	0.03	0.10	1.03
Gang influence	0.08	0.07	1.08	0.09	0.07	1.10	0.14	0.28	1.15
No. of previous out-of-home placements	0.09	0.03	1.10*	0.09	0.03	1.10*	0.10	80.0	1.11
Violent toward family	0.20	0.08	1.22*	0.21	0.08	1.23*	0.12	0.28	1.13
Parents divorced	-0.08	0.08	0.92	-0.10	0.08	0.91	-0.03	0.30	0.97
Family in poverty	0.04	90.0	1.05	0.05	90.0	1.05	0.04	0.21	1.04
Abuse	0.10	0.08	1.09	0.09	0.08	1.09	0.03	0.28	1.03
Treated	-0.28	0.08	.076	-0.38	0.08	*69.0	1.14	0.31	3.14*
Mental health	-0.01	0.10	0.99	0.02	0.10	1.02	-0.55	0.36	0.58
Cohort 1997/1998	1.33	0.08	3.79*	1.32	0.08	3.73*	1.92	0.32	6.84*
Sex	0.09	0.13	1.10				1		
Constant	-1.46	0.42	0.23*	-1.34	0.43	0.26*	-1.99	1.56	0.14
$X^2/df$			1091.0/16			1019.9/15			105.99/15
d			<.001			<.001			<.001
Nagelkerke $R^2$			0.28			0.29			0.34
Cox & Snell R <sup>2</sup>			0.21			0.21			0.25

\**p* < .05.

### **Institutional Danger**

Table 3 presents the analysis of the determinants of institutional danger—assault of staff and/or another resident and/or weapon possession while incarcerated. The analysis on the full sample of state delinquents in Table 3 reveals 12 significant variables impacting institutional danger. Non-White juveniles, those on probation at their state commitment, those considered high risks by the juvenile correctional system, gang members and/or those with gang-related family members, those with a higher number of previous out-of-home placements, those violent toward their family members, and males were found to be significantly more likely to be involved in misconduct indicating an institutional danger. State-committed delinquents who were older at their first formal referral to the juvenile justice system, those with more education, those youths who received specialized treatment for specialized needs, and state-committed delinquents from the 1997/1998 cohort were significantly less likely to be considered institutional dangers. In the full-sample model, the length of incarceration, although significant, had no impact either way on the odds of institutional danger misconduct.

An examination of the significant predictors of institutional misconduct is in the expected direction based on limited previous research on juveniles and the larger body of research on adults. Consistent with previous juvenile and adult misconduct research, non-White juveniles were significantly more likely to engage in misconduct, holding constant other variables (Cao et al., 1997; Harer & Steffensmeir, 1996; Sorensen et al., 1998), as were gang members or those with a history of gang membership (Gaes et al., 2002; MacDonald, 1999), those with less education (Cao et al., 1997), those with previous histories of violence (MacDonald, 1999; Poole & Regoli, 1984), and those with more serious delinquent/criminal histories (Flanagan, 1980, 1983; Harer & Steffensmeier, 1996). Notably, although the determinants of misconduct for juveniles and adults may differ, the results in Table 3 for the full sample seem to support the idea that what leads to misconduct for adults is similar for juveniles and in the same direction.

Beyond the general similarities to previous juvenile and adult misconduct research, there are two additional findings that require further elaboration. First, the finding that cohort membership matters is an important one. Youth from the 1997/1998 cohort were significantly less likely to be involved in institutional danger misconduct. This finding perhaps suggests that youth are getting more serious over time in terms of their institutional misbehavior (MacDonald, 1999) or at the least that the state under study is committing more serious delinquents than in the past. Although institutional and/or staff practices during the years may have changed in terms of formally resolving and documenting incidents, the fact that being an institutional danger—having assaulted staff, other residents, or being found in possession of a weapon—are likely to be formally resolved and consistently dealt with by institutional authorities whether in 1997-1998 or 2003-2004 bolsters this claim, and this is supported by previous research (MacDonald, 1999, p. 40).<sup>15</sup>

Another noteworthy finding is that those juveniles younger at their first formal referral were more likely to commit institutional danger misconduct than those who were older at their first formal contact in juvenile justice. 16 This finding has some relevance to adult misconduct research that finds that older adult inmates are less likely to be involved in misconduct (Cao et al., 1997; Flanagan, 1980, 1983; Harer & Steffensmeier, 1996; Wooldredge, Griffin, & Pratt, 2001) and to research examining the transition of state-committed juveniles

from adolescence to adulthood (Piquero, Brame, & Lynam, 2004; Trulson et al., 2005). Perhaps those most likely to move on to adult prisons are those who are in contact with the formal juvenile system early, are subsequently institutionalized in juvenile facilities at earlier ages, and continue to offend both in and out of institutions and end up as the youngest incarcerated adults. Indeed, recent research suggests that those juveniles who begin offending early and engage in serious misconduct while incarcerated are most likely to recidivate and perhaps be re-incarcerated in the adult system where they continue their deviant behavior (Trulson et al, 2005; see also Camp & Gaes, 2005). Certainly, the seemingly conflicting yet parallel finding between adult misconduct research and the findings of this article on age and misconduct involving delinquents—that younger inmates are more likely to be involved in institutional misconduct whether in juvenile or adult institutions, but that older inmates are less likely to be involved in misconduct whether in juvenile or adult institutions—presents an interesting paradox for future exploration. As older institutionalized juveniles transition to being the youngest adults in prisons, the dynamic of age and misconduct may flip whereby younger adult inmates may again be more likely to be involved in misconduct if institutionalized.

Although there are certain to be many speculative explanations for this finding, it may be that young offenders may feel the need to be violent and disruptive to make a place for themselves in the prison culture among older and perhaps more experienced inmates—regardless of whether placement is in a juvenile or adult setting (Poole & Regoli, 1983). Thus, perhaps the youngest inmates are not as adept at enduring the pains of imprisonment compared to older and more experienced inmates (Sorensen et al., 1998). If one assumed that young juvenile state commitments are the most likely to move on to the adult prison system, this does not necessarily mean that they have become accustomed to the pains of imprisonment during their juvenile incarceration and should adapt well in the penitentiary. Lengths of incarceration for state-committed delinquents are much shorter on average than for adults, so placement in an adult penitentiary may present the formerly institutionalized juvenile with a new and more intense set of deprivations than before. Indeed, adult prisoner research reveals that those with a previous record of juvenile incarceration are more likely to engage in institutional violations (Cao et al., 1997); thus, there is some evidence to suggest that perhaps the pains of imprisonment do not go away after a former incarceration—juvenile or otherwise.

On the other hand, and more consistent with importation model assumptions, young inmates in either institutional setting may be qualitatively different than other inmates concerning the determinants of misconduct, beyond their young age. A useful line of research on misconduct among state-committed delinquents or adult prison inmates would be to compare the youngest commitments to everyone else. It was already revealed in this study that those younger at their first formal contact with the juvenile justice system are most likely to engage in misconduct; future analysis can examine what it is about these young commitments, if anything, that differ from other state delinquents and how that might impact institutional misconduct. If there is little difference between the young and the old beyond age, this might provide some support for the deprivation model.

Table 3 also includes two separate models examining males and females separately. For males, the results of the analysis are nearly identical to the full-sample analysis. All significant findings concerning males are consistent and in the same direction with the full model

examining the outcome of institutional danger. This is not surprising, however, as male delinquents make up more than 90% of the full sample. For female state delinquents, however, results are much different. Only three variables were significant in an explanation of institutional danger. Special attention is paid to risk score, which indicates that female state delinquents considered high risk by the juvenile correctional system were significantly more likely to be involved in incidents indicating institutional danger. However, the finding that those female delinquents who received specialized treatment were significantly more likely to be considered institutional dangers is somewhat surprising considering that males who received specialized treatment were less likely to engage in institutional danger incidents. The overall yet tentative findings in the model suggest that the determinants of institutional danger for males may differ for females.

### **Institutional Disruption**

The analysis in Table 4 examines variables associated with institutional disruption—failing to follow the reasonable written requests of staff. This variable measures much less serious behavior than the variables comprising institutional danger, although failing to following institutional directives has the potential to have a significant disorderly effect on the institutional environment. The full-sample analysis revealed nine significant variables. As a whole, those younger at first formal referral to the juvenile justice system, those on probation at their state commitment, those considered high risks as classified by the correctional system, those with less education completed, those with a higher number of out-of-home placements, those with a history of violence toward their family, those that were not treated for specialized needs, and those from the 1997/1998 cohort were significantly more likely to be considered institutional disruptions. As with the model for institutional danger, the length of incarceration had no effect either way on the odds of institutional disruption incidents. Compared to the full-sample analysis for institutional danger, race, sex, and gang influence failed to be significant in the full-sample model for institutional disruption.

The institutional disruption model for males resembles the model for the full-sample analysis, finding that all the same variables are significant and in the same direction. As with the full-sample analysis, race and gang influence fail to be significant predictors of institutional disruption. For females, there were fewer significant predictors of institutional disruption. In this model, the only significant variables that impacted the odds of being an institutional disruption included whether or not the youth received specialized treatment and cohort membership. Those not treated and those female juveniles in the 2003/2004 cohort were significantly less likely to be involved in institutional disruptions. As with the previous model of institutional danger in Table 3, it appears that the determinants of institutional disruption may differ among males and females. However, the sample size of 375 female state delinquents might have masked significant relationships that were found with the larger sample of males in both logistic regression models. Therefore, the findings for females are tentative.

There are a couple of findings in comparing the analyses of institutional danger and institutional disruption worth exploring further. First, from a practical standpoint, the consistency of the risk-score classification for either institutional danger or institutional disruption, especially

for males, suggests that juvenile correctional administrators have a good instrument to predict which delinquents may emerge as institutional behavioral problems. This is promising because not only can those at risk of being institutional dangers and disruptions be identified, but also more attention can perhaps be focused on these youth to cease problem behavior before it starts and/or escalates to more serious behaviors.

Second, the cohort direction changed in the model predicting institutional disruption, finding 1997/1998 cohort membership associated with an increased likelihood for institutional disruption (1997/1998 cohort was associated with decreased likelihood for institutional danger). This finding may be explained by considering the possibility that policy and other formal and informal procedures have changed whereby institutional staff has deemphasized the formal sanctioning of youth for less serious misconduct. Indeed, the finding that the 2003/2004 cohort was significantly more likely to be involved in incidents indicating an institutional danger, thus perhaps more serious individuals than the 1997/1998 cohort, may mean that the juvenile correctional system has had to focus its efforts on more serious incidents and spend less attention on less serious infractions of the 2003/2004 cohort. In short, less serious incidents, such as failing to comply with a reasonable written request of staff, may have been "normalized" for the 2003/2004 cohort, for which, when compared to more serious incidents, they receive less formal attention from staff. There is evidence of such normalization occurring in probation when probation officers must deal with increasingly more dangerous and violent caseloads, so less serious technical violations are overlooked for new offenders (Del Carmen & Trulson, 2005). The bottom line is that staff members cannot enforce all the rules all the time and must partition their time and efforts to the most serious incidents.

Furthermore, race, gang influence, and sex failed to be significant predictors of institutional disruption, whereas they were significant for institutional danger. This might be explained by the fact that certain delinquents may have a greater propensity to be involved in assaults and weapons possession, yet most state delinquents may have the propensity and certainly the opportunity to fail to comply with reasonable written requests of institutional staff. Thus, the patterns in the data for institutional disruption are perhaps not as clear-cut as they are concerning the relationship of variables to the more serious incidents comprising institutional danger.

Overall, differences in incident reporting may shed some light on the different outcomes and variables predicting institutional danger and disruption. Although it is likely that institutional danger misconduct is dealt with similarly within and between institutions and across different time periods, it could be the case that failing to comply with requests of staff, or other less serious forms of institutional misconduct, are handled differently within and between institutions and across different time periods and that this variation could have impacted the findings. It might also be noted that some institutions and their staff members may be more skilled at preventing such misconduct. Although these explanations are only speculation, an interesting avenue for future research with this sample or comparable samples would be to venture further into an explanation of potential changes in incident reporting and resolution among different institutions within a state and across different time periods, and how that might impact the prevalence and incidence of different types of institutional misconduct.

## **Summary of Findings, Limitations,** and Suggestions for Future Research

This article examined the determinants of institutional misconduct among nearly 5,000 state-committed delinquents incarcerated and released from a large Southern juvenile correctional system. Although research concerning the determinants of adult inmate misconduct continues to grow, there remains a large gap in the literature examining the determinants of misconduct among state-committed juveniles. In light of a number of significant predictors of both forms of institutional misconduct, the findings in this article can be summarized as follows: Males, non-Whites, those with a gang influence, and those with earlier, more extensive, and more serious delinquent histories were significantly more likely to commit institutional infractions consistent with being an institutional danger—assaulting staff, assaulting residents, and possessing a weapon. The same findings held true for institutional disruption, with the exception that race, sex, and gang influence failed to be significant. Overall, the determinants of either form of institutional misconduct appeared to differ for females. When females were analyzed separately, few variables emerged as significant or consistent predictors of misconduct. In general, the analyses in this article reveal moderate support for importation variables. Although deprivation variables were not specifically examined in this article, the variance explained suggests importation variables do offer some explanation for the institutional misconduct of the state-committed delinquents in this article.

There are limitations associated with this article that, if remedied, could have improved the research. One of the major limitations was the small sample size of females. Although this limitation was unavoidable for this research effort because few females are incarcerated and released from the juvenile correctional system under study in any given year, future research would benefit from a larger female sample. Although the number of variables relative to the number of females examined in this article was not wildly disproportionate, the small sample size could have masked certain statistically significant relationships. Noting this limitation, however, this article represents one of the first efforts specifically examining institutional misconduct among state-committed females. The tentative finding is that what impacts misconduct among males may differ for females. Certainly, however, much more research is needed to confirm these findings.

Second, we were limited in the number of variables in this article, particularly variables that are more consistent with the deprivation model. Previous research has been criticized for ambiguous specifications and proxies for deprivation variables, but it would have been useful to examine the relative influence of these types of variables (such as adherence to an inmate code or type of institutional orientation) on state delinquent misconduct. Although previous research has shown more consistent and significant effects for individual and delinquent/criminal history variables, it is still a limitation in this article. In some ways, this was unavoidable. For example, specifying whether an institution was treatment-oriented or custodial (Poole & Regoli, 1983) would have been difficult in this study, for institutions in the state under study are relatively homogenous, thus any variable specification would have been unclear methodologically and speculative at best. Although the institution for which the juvenile was incarcerated and released from could have given some evidence of institution effects, the data in hand did not allow this type of analysis. Many state-committed delinquents in this state were incarcerated in one facility but released from another facility at the expiration of their commitment. Because we had access only to information on their release facility, this did not enable an accurate analysis of potential institution effects or other measurable differences between institutions concerning institutional misconduct. If the institutional placement was available, however, this could have provided some evidence as to institutional effects—especially concerning the resolution of nonserious incidents for which discretion among staff is perhaps more prevalent.<sup>17</sup>

Although the variance explained in the various logistic regression models ranged from 16% to 34%, there is still much variance to be explained regarding the determinants of institutional misconduct. Although we included variables consistent with previous juvenile and adult research, future efforts will focus on including more variables and also aim toward more precise variable measures. For example, the failure of abuse to explain misconduct was surprising in some sense, and the lack of significance could relate to the way these variables are constructed in the first place. Although variables, such as age at first formal referral to the juvenile justice system or time served, are relatively clear methodologically, abuse measures are not as often constructed based on the self-reports of youth. Certainly, the disadvantages to self-report abuse measures are well-documented and need not be repeated here, although such disadvantages may have impacted the findings in this study.

Finally, we had to be selective in the categorization of the dependent variables in this study. Although our measures of institutional danger and institutional disruption include variables that are consistent with these labels, there were a number of incident categories that could have been examined. For parsimony in presentation and consistent with dependent variable specifications in previous research, we focused on two extremes (e.g., most serious incidents and more disruptive but not serious incidents). Future analyses might benefit from focusing on different misconduct indicators and whether the significant predictors used in this article are consistent across several different misconduct indicators—both serious and nonserious. As with previous research, we found that the specification of misconduct makes a difference (Camp et al., 2003; Cao et al., 1997; Jiang & Fisher-Giorlando, 2002), for certain variables related to institutional danger misconduct failed to be significant for institutional disruption misconduct. Such a consistent finding across several studies means that attention to different misconduct indicators is warranted. In addition, it would also have been useful to have access to a variety of measures of inmate maladjustment beyond official misconduct and to compare the influence of variables on those different measures. Few research efforts on institutionalized juveniles have focused on alternative measures of maladjustment such as anxiety or lack of progress in a treatment program (see Gover, MacKenzie, & Armstrong, 2000). Although we did not have access to such variables, the addition of multiple indicators of maladjustment beyond misconduct could have improved this research.

In general, the findings in this article indicate that the determinants of misconduct for juveniles are similar to those found in adult misconduct research. The findings in this article then present a call for future research on state-committed delinquents to confirm or refute these findings. As mentioned earlier, an interesting avenue to explore further is the impact of age or its correlates on institutional misconduct. The results of this study mesh with most adult misconduct literature findings that as age increases, the likelihood of misconduct decreases. Such a parallel finding to adult misconduct research begs the question of what is it that makes older institutionalized juveniles less likely to be involved in misconduct but young adult inmates most likely to be involved in institutional misconduct. Older institutionalized juveniles may be

separated by only a few years from young adult inmates. Why is it that being young increases the likelihood of misconduct, whether in juvenile or adult institutions? Some speculation was offered in this article and is an interesting avenue for future research. A logical focus of future research should be whether this effect is the result of institutions and/or staff practices or whether young juvenile wards and young adult prison inmates are different than other inmates in terms of what they import into the institutional setting, other than their young age.

Still yet, future research should explore the impact that different reporting practices have on institutional misconduct. Potential differences in the reporting and/or resolution of incidents both within and between institutions and staff plague any sort of research in which data are derived from staff members' sometimes subjective decisions. Most of the time, this problem cannot be overcome as data collected by agencies is not necessarily for researchers in the first place, and researchers must often accept what they get. Noting these considerations, however, particular attention should be paid to less serious forms of misconduct in which discretion among officers is high.

Another potential avenue for future research would be to determine whether consistency can be found in variables predicting both institutional misconduct and postrelease recidivism. Some research suggests that these two forms of behavior and their determinants are related (Camp & Gaes, 2005). A finding that what predicts misconduct predicts recidivism would be important at the practical level and has important implications for those most at risk for failure once released from incarceration.

In light of the limitations and suggestions for future research, we do not view this research as the end-all concerning institutional misconduct for state-committed juveniles. There simply remains much to be done for a full understanding of the causes and consequences of institutional misconduct. However, the relative lack of literature on juvenile institutional misconduct makes this article a good starting point for up-to-date research on institutional misconduct for state-committed delinquents.

#### Conclusion

Correctional systems cannot undo the histories of the delinquents they are charged with supervising and rehabilitating. For the most part, when delinquents reach state commitment, they are considered the most serious, violent, and incorrigible delinquents in the state. Oftentimes, unrealistic expectations are placed on correctional systems to change a lifetime of behavior in a year or less and also to make sure that the changes hold once a youth returns to the same environment that produced them. But this article revealed that some of the factors related to misconduct can be identified and perhaps more important, that intervention may be able to attack some of those causes. In general, a major implication of this article is not only being able to uncover the determinants of misconduct—who is and who is not most likely to be involved in it—but also to intervene and help change the trajectories of those on the path to misconduct.

In conclusion, it is also important to note that the determinants of institutional misconduct cannot be divorced from other problems behaviors such as recidivism (Camp & Gaes, 2005; Trulson et al., 2005). A focus on the determinants of misconduct then may be a worthwhile task that garners a positive byproduct of making progress in dealing with other problem behaviors once a youth transitions out of incarceration to the streets.

# Appendix A Variables and Coding

Variable	Coding
Demographic variables	
Race	1 = non-White; 0 = White
Sex	1 = male; 0 = female
Delinquent history variables	
Age at first formal referral to juvenile system	Continuous coding
Age at state commitment	Continuous coding
Age at release from incarceration	Continuous coding
Length of incarceration (days)	Continuous coding
Felony adjudications prior to state commitment	Continuous coding
Risk score	1 = high risk; 0 = low risk
On probation at state commitment	1 = yes; 0 = no
Degree of commitment offense	1 = felony; 0 = misdemeanor
Known gang member	1 = yes; 0 = no
Violent toward family	1 = yes; 0 = no
Risk factor variables	
Family members are gang-related	1 = yes; 0 = no
No. of previous out-of-home placements	Continuous coding
Highest grade completed	Continuous coding
Parents divorced (if married)	1 = yes; 0 = no
Family in poverty	1 = yes; 0 = no
Evidence that youth was physically abused	1 = yes; 0 = no
Evidence that youth was sexually abused	1 = yes; 0 = no
Evidence that youth was emotionally abused	1 = yes; 0 = no
Evidence of physical neglect	1 = yes; 0 = no
Evidence that youth was abandoned	1 = yes; 0 = no
Need for emotional disturbance treatment	1 = yes; 0 = no
Need for sex offender treatment	1 = yes; 0 = no
Need for capital offender treatment	1 = yes; 0 = no
Received emotional disturbance treatment	1 = yes; 0 = no
Received sex offender treatment	1 = yes; 0 = no
Received capital offender treatment	1 = yes; 0 = no
Youth mentally challenged	1 = yes; 0 = no
Youth mentally ill	1 = yes; 0 = no
Any suicidal tendencies	1 = yes; 0 = no

## Appendix B Variables and Coding for Logistic Regression Models

Variable	Coding
Race	1 = non-White; 0 = White
Sex	1 = male; 0 = female
Age at first formal referral to juvenile system	Continuous coding
Age at state commitment	Dropped from analysis in favor of age at release from incarceration.
Age at release from incarceration	Dropped from analysis in favor of length of incarceration.

(continued)

## Appendix B (continued)

Variable	Coding
Length of incarceration (days)	Continuous coding
On probation at state commitment	1 = yes; 0 = no
Number of felony adjudications prior to state commitment	Dropped from analysis in favor of risk score, which contains felony adjudications prior to commitment.
Degree of commitment offense	Dropped from analysis in favor of risk score.
Risk score	1 = high risk; 0 = low risk
Highest grade completed	Continuous coding
Gang influence: A composite of known gang	1 = yes; 0 = no
member and family members gang related No. of previous out-of-home placements	Continuous coding
Violent toward family	1 = yes; 0 = no
Parents divorced (if married)	1 = yes; $0 = no$
Family in poverty	1 = yes; 0 = no
Abuse: A composite of evidence that youth was physically abused, sexually abused, emotionally abused, abandoned, and/or physically neglected.	1 = yes; 0 = no
Treated: A composite of received emotional disturbance treatment, received sex offender treatment, and received capital offender treatment	1 = yes; 0 = no
Mental health: A composite of youth who are mentally challenged, mentally ill, and any suicidal tendencies	1 = yes; 0 = no
Cohort	1 = 97/98 cohort I; $0 = 2003/2004$ cohort II

#### **Notes**

- 1. Other indicators of maladjustment include measures such as suicidal behavior, self-destructive behavior, or anxiety. The bulk of the research focuses on misconduct, but this is not to say that other indicators of maladjustment are unimportant.
- 2. In addition to deprivation and importation rationales for prison misconduct, others have proffered a situational model explaining inmate behavior in prison settings. The situational model assumes that institutional misbehavior is based on situational factors such as time of the year, climate, and other situational-based factors (Steinke, 1991). Thus, regardless of the deprivation of inmates or the pre-prison experiences of inmates, the situational model assumes that prison misconduct is largely the result of certain situational events converging that result in a rule infraction.
- 3. The studies listed are not mutually exclusive and may overlap into different categories. For example, some studies are noted as finding both importation and deprivation model support and, hence, are also included as studies that are somewhere in between a finding supporting importation and deprivation. Also, some studies find support for other models, such as the situational model that explains inmate misconduct as an interplay of situational-based factors such as time of year, not necessarily importation and deprivation variables. Moreover, some studies also find varied support depending on the type of outcome variable examined such as staff assaults versus inmate assaults or drug-use behavior versus general misconduct indicators and even indicators beyond misconduct, such as anxiety.
- 4. Gover, MacKenzie, and Armstrong (2000) conducted a more recent study on inmate adjustment to correctional facilities. This study measured adjustment to correctional settings (training schools, detention facilities, and boot camps) with an anxiety scale as the dependent variable. The authors of this study did not

specifically examine rule infractions as an outcome variable. See also Sieverdes and Bartollas (1986) on adherence to the "peer culture" among state-committed juveniles, Feld (1981) on organizational structures and inmate subcultures in juvenile institutions, and Murrie, Cornell, Kaplan, McConville, and Levy-Elkon (2004) on measures of psychopathy and violent behavior among institutional juveniles. Thus, there are studies of institutionalized juveniles in the literature, although only a few focus on institutional misconduct and others are highly specialized on certain delinquents or measures, such as psychopathology.

- 5. See, however, Ireland (1999) for bullying behaviors among institutionalized "young offenders" in the United Kingdom; and Power, Dyson and Wozniak (1997) for bullying among Scottish young offenders for a comparative perspectives outside the United States. See also Shields and Simourd (1991) on "predatory behavior" in a population of incarcerated young offenders for comparative perspectives outside the United States.
- 6. All the studies selected were the most recent in the literature that tested the theoretical models of importation and deprivation and were focused on inmate misconduct instead of other indicators of maladjustment, such as anxiety and stress. The bulk of studies on inmate misconduct frame the research in terms of the importation or deprivation models, or they integrate these two models. See, however, Camp, Gaes, Langan, and Saylor (2003); Gaes, Wallace, Gilman, Klein-Saffran, and Suppa (2002); and Wooldredge, Griffin, and Pratt (2001) for studies examining inmate misconduct outside the theoretical models of importation and deprivation but using similar variables.
- 7. It should be noted that in the Jiang and Fisher-Giorlando (2002) study, their sample size consisted of 186 prisoners including 431 disciplinary reports covering a 6-month cross-section of time. It may be the case that with the large number of variables used in the logistic regression analysis (36 independent variables particularly for the combined models) combined with the small sample size meant that their statistical technique was unable to uncover statistically significant relationships found in previous research—notably, age and race.
- 8. In many ways, this lack of consistency for deprivation model indicators may link to the varying deprivation measures used in adult-prison-inmate misconduct research. Although age, race, and other importation factors are fairly clear methodologically, deprivation factors are not and numerous operationalizations and proxies exist in the literature.
- 9. Numerous other studies of the factors related to inmate misconduct have been conducted beyond the above-mentioned studies but did not necessarily test a theoretical model of inmate adaptation—specifically, importation, deprivation, or an integrated model. See Camp et al. (2003), Gaes et al. (2002), and Wooldredge et al. (2001) for more recent studies examining determinants of inmate misconduct.
- 10. Unfortunately, data were not available for those in the cohorts with more than one incarceration. If such youth were available, previous number of incarcerations could have been used as a control variable in the regression analysis. Because the data come from two cohorts separated by roughly 5 to 6 years, we use cohort type as a control variable in the regression analysis.
- 11. There were some minor changes to incident collection forms over the years. The most extensive change was the addition of a few new incident categories for the 2003/2004 cohort. This did not affect the analysis for the dependent variables comprising institutional danger and institutional disruption. Data from old and new forms did not overlap, and we were able to combine the variable categories for these and other variables not used in the analysis.
- 12. Table 1 and Table 2 include independent-samples t tests for male and female comparisons. Normally, this test is inappropriate when using nominal or ordinal data. The assumptions of normality and homogeneity of variance are violated, and the dependent variable is in categorical form. For all comparisons among males and females, nominal and ordinal variables were coded as numeric in SPSS, and Mann-Whitney U nonparametric tests were performed for two independent samples. This test does not assume normal distribution or homogeneity of variance. Also conducted were independent-sample t tests. Results from both analyses produced exact or similar results; thus, the more familiar t value was placed in Tables 1 and 2.
- 13. The great majority of incidents in this juvenile correctional system were not serious for either males or females and can best be described as generally disruptive. This juvenile correctional system tracks more than 20 different types of incidents, only 4 of which are examined in this article. For example, analysis not in tabular form revealed that most incidents are for refusing to follow instructions, dress-code violations, self-referrals to security, and so forth. Thus, most forms of misconduct are relatively minor and less disruptive and serious than the dependent variables used in this article.

- 14. Prior to the analyses, several diagnostic procedures were completed to ensure adherence to logistic regression assumptions. Although logistic regression is a robust statistical model that can account for violations of normality and linearity, a major assumption is that variables not be collinear. Correlations among independent variables were inspected, and there were several highly correlated variables. As a result, some variables were collapsed, combined, and/or deleted from the analysis in favor of other variables (see Appendix B). Following this modification of variables, an ordinary least squares (OLS) model was produced only to examine multicollinearity diagnostic statistics among the variables (variance inflation factor and tolerance). Following this procedure, it was revealed that none of the independent variables exceed 2.0 variance inflation factor (VIF) after collapsing, combining, and/or deleting highly correlated variables.
- 15. We did an analysis comparing the 1997/1998 cohort to the 2003/2004 cohort. There were several statistically significant differences between the cohorts, and in general, the 2003-2004 cohort appeared to have more serious delinquent history records. All things being equal concerning institutional responses to incidents indicating an institutional danger, this lends at least tacit support to claims that juveniles may be getting "more dangerous." This is only a tentative finding, however.
- 16. Age at first formal referral to the juvenile system was used in the regression analysis instead of age at state commitment or age at release from incarceration because of high correlations among the variables. Substituting either of these variables in the logistic regression model revealed significant and negative effects on institutional danger. Thus, age at first formal contact or its correlates produced the same results in the regression models.
- 17. There are other problems present with the number of institutions in this state. For example, using 30 or more different dummy variables for institutions presents problems if youth are not clustered in a few institutions in terms of a logistic regression model's ability to detect significance. Second, some institutions for juveniles were nonexistent for the 1997/1998 cohort but were there for the 2003/2004 cohort.

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